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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/441,443	05/15/1995	MICHAEL HOUGHTON	0063.024	1917
25226	7590	05/04/2005	EXAMINER	
MORRISON & FOERSTER LLP			ZEMAN, MARY K	
755 PAGE MILL RD			ART UNIT	
PALO ALTO, CA 94304-1018			PAPER NUMBER	
			1631	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

08/441,443

Applicant(s)

HOUGHTON ET AL.

Examiner

Mary K. Zeman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60-73, 78, 83, 88, 103, 134, 193, 273, 284 and 314 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

Continuation of Disposition of Claims: Claims pending in the application are 60-349,351,352,354,355,357,358,360-366,368,369,371,372 and 374-469.

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### DETAILED ACTION

The indicated allowability of claims 60-73, 78, 83, 88, 103, 134, 193, 273, 284, 314 is withdrawn in view of the newly discovered reference(s) to Kudo et al and others. Rejections based on the newly cited reference(s) follow.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The Following are representative art rejections that meet the limitations of the claims.

The examiner chose random 9-10-mer sequences from the figures for searching. The rejection lists the sequence searched, the figure from which the sequence was selected, and the registry number of the anticipating sequence. Only abstracts with relevant sequences are provided. The claims merely require a short contiguous sequence from either strand with an upper limit for the whole sequence. The sequence does not need to be from HCV, nor is it required to be HCV specific, or specifically identify HCV specific sequences or samples.

Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5101024.

US 5101024 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 1: GGCCTCCTG. (RN97708-13-9) which is less than 100 nj.

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Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by US4722897.

US 4722897 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 1: CTGGCTGC. (RN99533-38-7) which is less than 100 nt.

Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(e) as being anticipated by US 5310893.

US 5310893 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 1: CTGGCTGC. (RN158032-04-3) which is less than 100nt.

Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by WICH (1986).

WICH ( Systematic and applied microbiology 1986 7:1 18-25) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 1: GGCCTCCTGC. (RN104245-31-0) which is less than 100 nt.

Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by HOBART (1980).

HOBART (Nature 1980 288:5787 137-141) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 3: CTGGCTGCG. (RN77000-19-2) which is less than 400 nt.

Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(a) as being anticipated by GIESE.

GIESE (JBC 1987 262 (31) 15251-5) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 3: TCACCAGCC. (RN112263-07-7) which is less than 400 nt.

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Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by SAHAGAN.

SAHAGAN (J Immunol 1986 137:3 1066-74) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 4: CATCAGTGGG. (RN104491-32-9) which is less than 400 nt.

Claims 60-63, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by KRISTO.

KRISTO (DNA 1984:3 (4) 281-286) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 4: CATCAGTGGG. (RN93927-63-0) which is less than 200 nt.

Claims 64, 65 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by CHISHOLM.

CHISHOLM (PNAS USA 1984 81 (10) 2965-2969) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 14a: TGCTTACAT. (RN91756-05-7) which is less than 400 nt.

Claims 64, 65 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by STARNES.

STARNES (FEMS Microbiology Letters (1985) 28(2)165-9) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 14a: TGCTTACAT. (RN98443-94-8) which is less than 400 nt.

Claims 64, 65 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by DENNY.

DENNY (Molecular and Cellular Biology 1985 5:11 3199-3207) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 14b: CACTCATAT. (RN99752-03-1) which is less than 400 nt.

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Claims 64, 65 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by TABATA.

TABATA (Gene 1984 31 (1-3) 285-289) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 14c: GAAGGTCCT (RN94895-12-2) which is less than 400 nt.

Claims 64, 65 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(e) as being anticipated by US 5,268,278.

US 5,268,278 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 14c: GAAGGTCCT. (RN100438-83-3) which is less than 400 nt.

Claims 66, 67, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by SCHNEIDER-GAEDICKE.

SCHNEIDER-GAEDICKE (EMBO Journal 1986 5:9 2285-2292) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 26a: GGTATTTGA. (RN105843-47-8) which is less than 400 nt.

Claims 66, 67, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by SOMA.

SOMA JP60176588 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 26b: CAAGGGGCC. (RN100984-20-1) which is less than 400 nt.

Claims 66, 67, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by VALENZUELA.

VALENZUELA (ICN Symposia 1980 18:57-70) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 26c: ACGGCAAGG. (RN77271-73-9) which is less than 400 nt.

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Claims 66, 67, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35

U.S.C. 102(b) as being anticipated by BECHHOFFER.

BECHHOFFER (Nucl. Acids Res. 1983 11(21) 7453-7469) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 26d: CGTACATCG. (RN88748-47-4) which is less than 400 nt.

Claims 68, 69, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35

U.S.C. 102(b) as being anticipated by NISHIKAWA.

NISHIKAWA (Nucleic Acids Symposium Series 1985 16:287-90) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 57: ATGAGGGCT. (RN97708-04-8) which is less than 400 nt.

Claims 72-73, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35

U.S.C. 102(b) as being anticipated by Kroeger.

KROEGER (Gene 1982 20:1 25-38) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 72a: ATGAGCACG. (RN84616-07-9) which is less than 400 nt.

Claims 72-73, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35

U.S.C. 102(e) as being anticipated by US4769326.

US 4769326 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 72d: ATGATGATG. (RN80208-71-5P) which is less than 400 nt.

Claims 72-73, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35

U.S.C. 102(b) as being anticipated by EP 35384.

EP 35384 the EP equivalent of US 4769326 discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 72d: ATGATGATG. (RN80208-71-5P) which is less than 400 nt.



Claims 72-73, 78, 83, 88, 103, 134, 193, 273, 284, 314 are rejected under 35 U.S.C. 102(b) as being anticipated by PETERSON.

PETERSON (EUROPEAN Journal of Biochemistry 1984 143(3) 507-11) discloses an isolated polynucleotide (DNA, RNA, oligonucleotide) comprising the following sequence from FIG 72f: TGCCCACT. (RN92942-24-0) which is less than 400 nt.

### ***Conclusion***

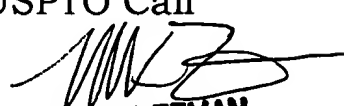
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (571) 272 0723

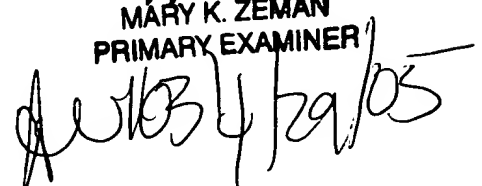
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, PhD can be reached on (571) 272 0718. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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MARY K. ZEMAN  
PRIMARY EXAMINER

  
2/29/05